

REMARKS

This Amendment is submitted in reply to the non-final Office Action mailed on July 10, 2005. A petition for a one month extension of time is submitted herewith. The Director is authorized to charge \$120.00 for the petition for extension of time and any additional fees which may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 112701-458 on the account statement.

Claims 1-6, 11-14 and 21-24 are pending in this application. Claims 7-10 and 15-16 were previously canceled. Claims 17-20 have been withdrawn previously. Claims 21-22 are allowed. In the Office Action, Claims 2-3 and 12 are objected to and Claims 1-6, 11-14 and 23-24 are rejected under 35 U.S.C. §103. In response Claims 1-2 and 23-24 have been amended. This amendment does not add new matter. In view of the amendment and/or for the reasons set forth below, Applicants respectfully submit that the rejections should be withdrawn.

In the Office Action, Claims 1 and 4 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,584,888 to Cortese ("*Cortese*") in view of U.S. Patent No. 5,440,972 to English ("*English*"). Claims 23-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,921,168 to Nello ("*Nello*") in view U.S. Patent No. 3,955,713 to Hurley ("*Hurley*"). Applicants believe these rejections are improper and respectfully traverse them for at least the reasons set forth below.

Applicants have amended independent Claims 1 and 23-24 to recite, in part, a controller that switches off or reduces power of the heating element when the pump is running, reduces power in that the heating element operates only on demand when a beverage is to be dispensed and stops heating when the required temperature is reached. The amendment is fully supported in the specification, for example, at page 1, lines 26-35. Applicants have also amended Claims 1 and 23-24 to recite, in part, that the cartridge is brewed under pressure. The amendment is fully supported in the specification, for example, at page 2, lines 27-33. In view of the Patent Office's comments regarding operation of the heater being an intended use, amended Claims 1 and 23-24 positively recite, in part, a controller that switches off or reduces power of the heating element when the pump is running. In contrast, Applicants respectfully submits that, even if combinable, all of the claimed elements are not taught or suggested by the cited references.

The controller as recited in Claims 1 and 23-24 performs two functions. First, it switches off or reduces the power of the heating element when the pump is running. Second, it operates the heating element only on demand when a beverage is to be dispensed and stops heating when the required temperature is reached. These operations of the controller enable the espresso coffee machine to properly manage electrical power.

Regarding the rejection of Claims 1 and 4, *Cortese* and *English* fail to disclose or suggest a controller that switches off or reduces power of the heating element when the pump is running, reduces power in that the heating element operates only on demand when a beverage is to be dispensed and stops heating when the required temperature is reached as required, in part, by Claim 1. For example, *Cortese* fails to disclose or suggest any controller. In addition, *Cortese* and *English* fail to disclose or suggest the cartridge is brewed under pressure as required, in part, by Claim 1.

English is directed to a regular portable coffee maker. See, *English*, column 3, lines 39-42. An espresso coffee machine requires much more power than non-espresso coffee machines such as the one described in *English*. The reason is that in an espresso coffee machine the pump dispenses water at relatively high pressure so that the coffee contained in a cartridge is brewed under pressure. The cartridge can even be opened under pressure. To manage the electrical power in a low-voltage vehicle, the espresso coffee machine controller of Claim 1 switches off or reduces power of the heating element when the pump is running, operates the heating element only on demand when a beverage is to be dispensed and stops heating when the required temperature is reached. In contrast, *English* teaches a pump that dispenses water at a pressure just sufficient to transport water above a pre-packaged filter by gravity wherein the brewed beverage flows by gravity. Consequently, *English* does not teach or even recognize Applicants' problems or offer any solutions regarding same.

English clearly fails to disclose a controller that switches off or reduces the power of the heating element when the pump is running in accordance with Claim 1. On the contrary, *English* teaches that the heater circuit is constantly operated at full line voltage throughout the brewing cycle. See, *English*, column 9, lines 6-8. *English* also teaches that the pump speed is varied during the brewing cycle as a function of the temperature reached by the beverage (due to the heater). More precisely, the motor speed is increased and pump speed increases to bring more liquid to the heater when the liquid temperature exceeds a predetermined temperature. Similarly,

motor speed and pump speed is decreased when the liquid temperature drops below a predetermined temperature. See, *English*, column 7, lines 21-30.

Moreover, *English* teaches away from Claim 1 in that the heater is maintained constantly "on" and the speed of the pump is used to control temperature. In an embodiment of Claim 1, the heater is switched off as the desired temperature is reached and the pump speed is not modified. Therefore, Claim 1 teaches operation of the heater and pump that is distinguishable from *English*. Whereas the controller reduces the power of the heating element when the pump is running and stops heating when the correct temperature is achieved in accordance with Claim 1, *English* teaches continuously operating the pump speed as a function of the temperature of the liquid.

This distinction is important because the power consumed by a heater is much higher than the power taken by a pump, even if the pump delivers fluid under pressure in the brewing chamber (which is not the case in *English*). Therefore, by reducing power to or switching power off the heater, one can make better power management than by varying pump speed as taught by *English*. Furthermore, *English* fails to teach or even suggest that its motor or pump's speed operation is carried out for efficiently managing power in a low-voltage vehicle. Instead, the pump speed operation in *English* is only for automatically heating a volume of liquid substantially equal to a single portion of a brewed beverage. See, *English*, column 2, lines 39-42. Because *English* is directed to automation of an ordinary manual process and fails to achieve power management in its device, *English* fails to provide a reasonable expectation of success in arriving at Claim 1 even if combined with *Cortese*.

Regarding the rejection of Claims 23-24, *Nello* and *Hurley* fail to disclose or suggest a controller that switches off or reduces power of the heating element when the pump is running as required, in part, by Claim 1. In fact, *Nello* and *Hurley* fail to even disclose or suggest any controller. *Nello* and *Hurley* also fail to disclose or suggest the cartridge is brewed under pressure as required, in part, by Claim 1.

For at least the reasons discussed above, the combination of *Cortese* in view of *English* does not teach, suggest, or even disclose Claim 1 and Claim 4 that depends from Claim 1. Similarly, the combination of *Nello* in view of *Hurley* does not teach, suggest, or even disclose Claims 23-24. As a result, the cited references fail to render the claimed subject matter obvious.

Accordingly, Applicants respectfully request that the obviousness rejections with respect to Claims 1, 4 and 23-24 be reconsidered and the rejections be withdrawn.


Claims 5-6, 11 and 13-14 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Cortese* and *English* and further in view of *Hurley*. Applicants respectfully submit that the patentability of Claim 1 as previously discussed renders moot the obviousness rejection of Claims 5-6, 11 and 13-14 that depend from Claim 1. In this regard, the cited art fails to teach or suggest the elements of Claims 5-6, 11 and 13-14 in combination with the novel elements of Claim 1.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly solicit an early allowance of same.

Respectfully submitted,

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